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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/069,474

06/14/2002

Wilhelmus Maria Van Der Krieken

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3344

7590

07/14/2004

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EXAMINER

BAUM, STUART F

ART UNIT

PAPER NUMBER

1638

DATE MAILED: 07/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

824

## Office Action Summary

Application No.

10/069,474

Applicant(s)

VAN DER KRIEKEN ET AL.

Examiner

Stuart F. Baum

Art Unit

1638

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 33-61 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 33-61 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Election/Restrictions*

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 33, 34, 35, and 36, drawn to a method for enabling rooting or grafting comprising treating the plant or cutting with a substance that discontinues the effect of a rooting-inhibiting gene product, wherein the rooting-inhibiting gene product is a cytokinin and said substance inhibits the biosynthesis of cytokinin chosen from the chemicals listed in claim 36.

Group II, claim(s) 33, 34, and 37, drawn to a method for enabling rooting or grafting comprising treating the plant or cutting with a substance that discontinues the effect of a rooting-inhibiting gene product, wherein the rooting-inhibiting gene product is a cytokinin and said substance is a structural analog of cytokinin chosen from the chemicals listed in claim 37.

Group III, claim(s) 33, 38, 39, 40, and 41 drawn to a method for enabling rooting or grafting comprising treating the plant or cutting with a substance that discontinues the effect of a rooting-inhibiting gene and results in expression of a second gene and the expression product of which discontinues the effect of the rooting-inhibiting gene wherein the second gene codes for an

Art Unit: 1638

antisense molecule of IPT or codes for the expression product of an IPT gene operably linked to a promoter in sense orientation.

Group IV, claim(s) 33, and 42 drawn to a method for enabling rooting or grafting comprising treating the plant or cutting with a substance that discontinues the effect of a rooting-inhibiting gene and results in expression of a second gene and the expression product of which discontinues the effect of the rooting-inhibiting gene wherein the second gene codes for one or more of the rolABC genes of *Agrobacterium rhizogenes*.

Group V, claim(s) 33, 43, and 44 drawn to a method for enabling rooting or grafting comprising treating the plant or cutting with a substance that discontinues the effect of a rooting-inhibiting gene and results in expression of a second gene and the expression product of which discontinues the effect of the rooting-inhibiting gene wherein the second gene codes for a repressor of the promoter of the rooting-inhibiting gene.

Group VI, claim(s) 33, 45, and 46 drawn to a method for enabling rooting or grafting comprising treating the plant or cutting with a substance that discontinues the effect of a rooting-inhibiting gene and results in expression of a second gene and the expression product of which discontinues the effect of the rooting-inhibiting gene wherein the second gene codes for a degradation enzyme of the rooting-inhibiting gene product.

Art Unit: 1638

Group VII, claim(s) 33, 47, and 48 drawn to a method for enabling rooting or grafting comprising treating the plant or cutting with a substance that discontinues the effect of a rooting-inhibiting gene and results in expression of a second gene and the expression product of which discontinues the effect of the rooting-inhibiting gene wherein the second gene codes for a mutated receptor for the rooting-inhibiting gene product.

Group VIII, claim(s) 49, 50, 51, 52, and 53 drawn to a transgenic containing a first gene coding for a rooting-inhibiting product and a second gene which codes for a product which deactivates the rooting-inhibiting product, wherein the second gene codes for an antisense molecule of an IPT gene or codes for the expression product of an IPT gene operably linked to a promoter in sense orientation.

Group IX, claim(s) 49, and 54 drawn to a transgenic containing a first gene coding for a rooting-inhibiting product and a second gene which codes for a product which deactivates the rooting-inhibiting product, wherein the second gene codes for one or more of the rolABC genes of *Agrobacterium rhizogenes*.

Group X, claim(s) 49, 55, and 56 drawn to a transgenic containing a first gene coding for a rooting-inhibiting product and a second gene which codes for a product which deactivates the

rooting-inhibiting product, wherein the second gene codes for a repressor of the promoter of the rooting-inhibiting gene.

Group XI, claim(s) 49, 57, and 58 drawn to a transgenic containing a first gene coding for a rooting-inhibiting product and a second gene which codes for a product which deactivates the rooting-inhibiting product, wherein the second gene codes for a degradation enzyme of the rooting-inhibiting gene product.

Group XII, claim(s) 49, 59, and 60 drawn to a transgenic containing a first gene coding for a rooting-inhibiting product and a second gene which codes for a product which deactivates the rooting-inhibiting product, wherein the second gene codes for a mutated receptor for the rooting-inhibiting gene product.

Group XIII, claim(s) 49, and 61 drawn to a transgenic which is reversibly protected against undesired vegetative propagation comprising treating the cutting or a graft with a stimulus that acts on a promoter operably linked to a gene whose gene product inactivates another gene product and placing the cutting or graft on a rooting medium.

2. The claims are not linked or share a single special technical feature because the invention of claim 33 does not constitute an advance over the prior art. Claim 33 is taught by Dobres et al (December 1998, U.S. Patent Number 5,843,782) who teach the method steps encompassed by

Art Unit: 1638

claim 33. Dobres et al teach a method of propagating a rose plant comprising culturing a cutting/explant of said rose plant on medium comprising hormones to produce a regenerated plant (claims 1-55). It is an inherent property of the hormones to discontinue the effect of an endogenous rooting-inhibiting genes of said plant. The Office interprets claim 33 to read on any gene that through evolution is placed under the regulation of an inducible promoter and wherein said gene inhibits the formation of roots on said cutting/explant while said cutting/explant is a part of the whole plant. Hence, there is no special technical feature that links or is shared by any of the groups, i.e., the method of enabling rooting comprising transforming a plant with a gene encoding a cytokinin and a substance that inhibits the biosynthesis of cytokinin of Group I, the method of enabling rooting comprising transforming a plant with a gene encoding a cytokinin and also using an analog of cytokinin of Group II, the method of using an antisense or sense IPT gene of Group III, the method comprising the rolABC genes of Group IV, the method of enabling rooting comprising transforming a plant with a gene encoding a repressor of the promoter of a rooting-inhibiting gene of Group V, the method of enabling rooting comprising transforming a plant with a gene encoding a degradation enzyme of the rooting-inhibiting gene of Group VI, the method of enabling rooting comprising transforming a plant with a gene encoding a mutated receptor for the rooting-inhibiting gene of Group VII, the transgenic plant comprising an antisense or sense IPT gene of Group VIII, the transgenic plant comprising one or more rolABC genes of Group IX, the transgenic plant comprising a nucleic acid encoding a repressor of the promoter of a rooting-inhibiting gene of Group X, the transgenic plant comprising a nucleic acid encoding a degradation enzyme of the rooting-inhibiting gene product of Group XI, the transgenic plant comprising a nucleic acid that encodes a mutated receptor for a

rooting-inhibiting gene of Group XII, or the transgenic plant which is reversibly protected against undesired vegetative propagation comprising treating the cutting or a graft with a stimulus that acts on a promoter operably linked to a gene whose gene product inactivates another gene product and placing the cutting or graft on a rooting medium of Group XIII.

3. Because these inventions are distinct for the reasons given above, have acquired a separate status in the art as shown by the literature and sequence searches required for each of the Groups are not required for another of the Groups, restriction for examination purposes as indicated is proper.

4. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(I).

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stuart F. Baum whose telephone number is 571-272-0792. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amy Nelson can be reached on 571-272-0804. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.



Application/Control Number: 10/069,474

Page 8

Art Unit: 1638

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-1600.

A handwritten signature in cursive script, appearing to read "Stuart F. Baum".

Stuart F. Baum Ph.D.

Patent Examiner

Art Unit 1638

July 7, 2004